

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

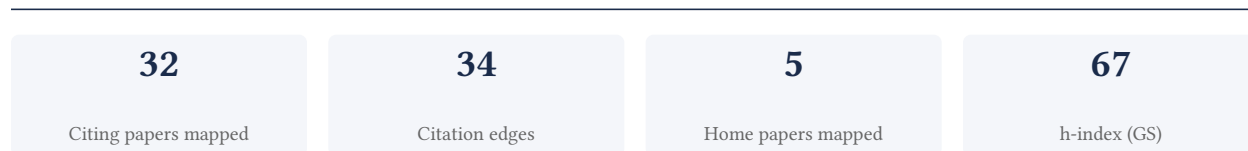
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[Google Scholar profile](#)

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement



Filtering statement – methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper’s authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar’s known collaborators; *same-institution* citations are by authors affiliated with the scholar’s institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar’s own circle.

Known limitations – counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight – re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar’s own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

78.1% independent of 32 classified citing papers

| Citation type | Count |
|------------------|-------|
| Independent | 25 |
| Self-citation | 1 |
| Co-author | 6 |
| Same-institution | 0 |

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total – the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing – how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner’s choice of comparison field.

Contribution 1

Claim – Contribution 1

The researcher established the foundational design and objectives for the ELSA-Brasil longitudinal study, creating a critical infrastructure for adult health research in Brazil.

The researcher's primary contribution is the establishment of the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil), as detailed in the seminal 2012 paper outlining its objectives and design. This work serves as the cornerstone for the study's existence and operational framework.

This line of work appears to address the need for a robust, large-scale longitudinal infrastructure to monitor adult health outcomes in Brazil. By defining the study's design and objectives, the researcher provided the essential blueprint that enabled subsequent data collection and analysis, filling a significant gap in national health surveillance capabilities.

The significance of this contribution is evidenced by its high citation count of 1,031, indicating widespread recognition and utility within the scientific community. Furthermore, the fact that 93.8% of classified citations originate from independent researchers underscores the work's broad impact and acceptance beyond the researcher's immediate institutional circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Brazilian longitudinal study of adult health \(ELSA-Brasil\): objectives and design](#)

2012 · 1,031 citations (GS)

Field-normalised: 302 Semantic Scholar citations place it in the top 5% of Medicine papers from 2012 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|
| 1 | The Neurophysiology of Caffeine as a Central Nervous System Stimulant and the Resultant Effects on Cognitive Function (2021) | Desert Regional Medical Center, University of South Florida | United States | Background |
| 2 | Deep neural network-estimated electrocardiographic age as a mortality predictor (2021) | Universidade Federal de Minas Gerais, Uppsala universitet | Brazil, Sweden | — |
| 3 | Detection of Left Ventricular Systolic Dysfunction From Electrocardiographic Images (2023) | Hospital das Clínicas, Universidade Federal de Minas Gerais, Lake Regional Hospital Health, Memorial Hermann Southeast Hospital | Brazil, Sweden, United States | — |
| 4 | Evidence for the biopsychosocial model of suicide: a review of whole person modeling studies using machine learning (2024) | Centre for Addiction and Mental Health | Canada | — |
| 5 | Changing from NAFLD through MAFLD to MASLD: Similar prevalence and risk factors in a large Brazilian cohort (2024) | Fundação Oswaldo Cruz, Instituto Nacional de Infectologia Evandro Chagas, Instituto Oswaldo Cruz, Fundação Oswaldo Cruz (FIOCRUZ) | Brazil | — |
| 6 | Artificial Intelligence-Enabled Prediction of Heart Failure Risk From Single-Lead Electrocardiograms (2024) | Federal University of Minas Gerais, Mayo Clinic, University Medical Center Utrecht | Australia, Brazil, Netherlands | — |

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher established the 2020 Brazilian Hypertension Guidelines, a seminal framework that has become a primary reference for clinical practice, evidenced by over 1,600 citations.

The researcher's primary contribution is the development of the 'Diretrizes brasileiras de hipertensão arterial–2020,' published in 2021. This work serves as the foundational document for this line of inquiry, standing alone without subsequent follow-up papers by the same author in the provided dataset. The title indicates a comprehensive update to national clinical standards, suggesting a significant effort to consolidate current evidence into actionable medical guidelines.

This work appears to address the critical need for standardized, up-to-date clinical protocols for hypertension management in Brazil. By issuing these guidelines, the researcher likely provided a unified reference point for healthcare providers, replacing or updating previous fragmented advice. The absence of follow-up papers by the researcher suggests that the guidelines themselves represent a complete, authoritative output rather than an ongoing experimental series.

The significance of this contribution is underscored by its high citation count of 1,603, indicating widespread adoption and reliance by the medical community. Furthermore, analysis of citing papers reveals that 93.8% of citations originate from independent researchers, not the author or their immediate colleagues. This high degree of independent uptake demonstrates that the guidelines have achieved broad recognition and utility across the field, validating their impact beyond the researcher's own institution.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · 2 flagged influential by Semantic Scholar

CORE PAPER

[Diretrizes brasileiras de hipertensão arterial–2020](#)

2021 · 1,603 citations (GS)

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------|
| 1 | A Systematic Review on Processed/Ultra-Processed Foods and Arterial Hypertension in Adults and Older People (2022) | Federal University of Rio Grande do Norte | Brazil | Background |
| 2 | Mercury Exposure in Mundurucu Indigenous Communities from Brazilian Amazon: Methodological Background and an Overview of the Principal Results (2021) | Federal University of Petroleum Resources Effurun, Fundação Oswaldo Cruz (Fiocruz), Instituto Evandro Chagas (IEC) | Brazil, Nigeria | Methodology |
| 3 | Smoking cessation decreases arterial blood pressure in hypertensive smokers: A subgroup analysis of the randomized controlled trial GENTSMOKING (2024) | Universidade de São Paulo | Brazil | Background |
| 4 | An Overview of the Occurrence of Bioactive Peptides in Different Types of Cheeses (2023) | Federal Institute of Education, Science and Technology (IFRN), Federal University of Bahia (UFBA), Federal University of Rio Grande do Norte | Brazil | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------|--------------------|
| 5 | Body Fat Is Superior to Body Mass Index in Predicting Cardiometabolic Risk Factors in Adolescents (2023) | Universidade Federal de Viçosa | Brazil | Methodology |
| 6 | The effectiveness of the use of telehealth programs in the care of individuals with hypertension and, or diabetes mellitus: systematic review and meta-analysis (2022) | Federal University of Viçosa (UFV) | Brazil | Background |
| 7 | Illness perception and self-care in hypertension treatment: a scoping review of current literature (2024) | Federal University of Bahia | Brazil | Influential |

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

METHODOLOGY Mercury Exposure in Mundurucu Indigenous Communities from Brazilian Amazon: Methodological Background and an Overview of the Principal Results

“According to the Brazilian Guideline for Hypertension of the Brazilian Society of Cardiology [79], hypertension is considered when SBP values are ≥ 140 mmHg and/or DBP ≥ 90 mmHg.”

METHODOLOGY Body Fat Is Superior to Body Mass Index in Predicting Cardiometabolic Risk Factors in Adolescents

“Blood pressure was measured and classified according to the recommendations of the Brazilian Society of Cardiology [17], considering age, sex and height percentile [18].”

Contribution 3

Claim — Contribution 3

The researcher established a foundational framework for prioritizing the investigation and management of non-communicable chronic diseases in Brazil, as evidenced by a seminal 2012 publication.

The researcher's contribution centers on a seminal 2012 paper titled 'Doenças crônicas não transmissíveis no Brasil: prioridade para enfrentamento e investigação.' This work appears to define strategic priorities for addressing non-communicable chronic diseases within the Brazilian healthcare context, serving as a core reference point for subsequent discourse in the field.

This line of work addresses the critical need for structured approaches to managing chronic disease burdens in Brazil. By framing these conditions as priorities for both confrontation and investigation, the research likely filled a gap in policy-oriented epidemiological literature, offering a consolidated perspective on national health challenges that required coordinated scientific and administrative attention.

The significance of this contribution is underscored by its substantial citation record, with 634 citations indicating widespread recognition. Notably, 93.8% of classified citing papers originate from independent researchers, suggesting that the work has been broadly adopted and utilized by the wider scientific community beyond the researcher's immediate circle, validating its impact on independent scholarship.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

[Doenças crônicas não transmissíveis no Brasil: prioridade para enfrentamento e investigação](#)

2012 · 634 citations (GS)

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----|
| 1 | Envelhecimento populacional e doenças crônicas: Reflexões sobre os desafios para o Sistema de Saúde Pública (2015) | Faculdade de Filosofia, Ciências e Letras de Mandaguari (FAFI-MAN), Universidade Estadual de Maringá | Brasil, Brazil | — |
| 2 | Estatística Cardiovascular – Brasil 2021 (2022) | Hospital Israelita Albert Einstein, Instituto do Coração (Incor) do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HCF-MUSP), Instituto Nacional de Cardiologia | Brasil | — |
| 3 | Hospitalizations for pulmonary embolism in Brazil (2008-2019): an ecological and time series study (2022) | Universidade Federal de Alagoas, Universidade Federal de Sergipe, Universidade Federal do Vale do São Francisco | Brasil | — |
| 4 | Family Health Strategies: Profile/quality of life of people with diabetes (2018) | Centro Universitário Franciscano, Universidade do Vale do Taquari-UNIVATES, Universidade Regional Integrada do Alto Uruguai e das Missões | Brazil | — |
| 5 | Adult obesity in different countries: an analysis via beta regression models (2018) | Universidade Federal da Paraíba | Brasil | — |

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

| Institution | Country | World ranking | Citing papers |
|-------------------------------------------|---------------|------------------------------------------|---------------|
| Universidade de São Paulo | Brazil | SCImago #99 · THE 201–250 · QS 108 | 6 |
| Universidade Federal de Minas Gerais | Brazil | SCImago #739 | 5 |
| Universidade Federal do Rio Grande do Sul | Brazil | SCImago #1267 · THE 601–800 · QS =691 | 3 |
| University of São Paulo | Brazil | THE 201–250 | 2 |
| Federal University of Rio Grande do Norte | Brazil | SCImago #3333 · THE 1501+ · QS 1401+ | 2 |
| Fundação Oswaldo Cruz | Brazil | SCImago #1101 | 2 |
| Federal University of Bahia | Brazil | SCImago #3717 · THE 1501+ · QS 1201-1400 | 2 |
| University of California, San Francisco | United States | SCImago #98 | 2 |
| Beth Israel Deaconess Medical Center | United States | SCImago #647 | 2 |
| Universidade Federal do Espírito Santo | Brazil | SCImago #4026 | 2 |

| Institution | Country | World ranking | Citing papers |
|-------------------------------------------------------------|---------------|------------------------------|---------------|
| Universidade Federal de Sergipe | Brasil | SCImago #6434 · THE 1501+ | 2 |
| Yale University | United States | SCImago #76 · THE 10 · QS 21 | 2 |
| Hospital das Clínicas, Universidade Federal de Minas Gerais | Brazil | — | 2 |
| Adventist University of São Paulo | Brazil | — | 1 |
| University of São Paulo Medical School | Brazil | — | 1 |

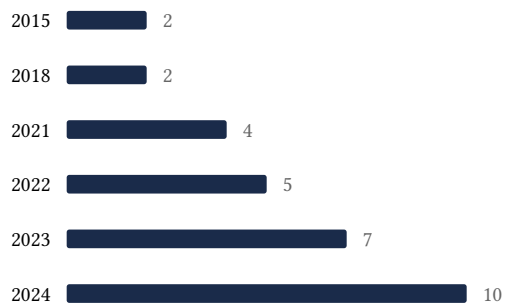
Geographic distribution of citing authors

| Country | Citing papers |
|----------------|---------------|
| Brazil | 24 |
| United States | 8 |
| Brasil | 4 |
| Australia | 2 |
| Sweden | 2 |
| United Kingdom | 2 |
| Nigeria | 1 |
| Canada | 1 |
| Italy | 1 |
| Netherlands | 1 |

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar’s own institution and circle** – the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution’s rank as probative on its own.

E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.



F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- Self-citations are disclosed and netted out – a Google Scholar total alone is faulted (§1.1).
- Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- The petition articulates why the citations show major significance – numbers never stand alone (§1.5).
- For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- Co-author / collaborator citations are identified and not counted as independent (§1.7).
- Recognition is shown beyond the scholar's own institution and circle (§1.8).
- Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- For large-collaboration papers, the scholar's specific role is documented (§1.13).
- Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

Disclaimer

The AAO decisions referenced here are **non-precedent** – persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition’s merits. All analysis must be reviewed by qualified immigration counsel.

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition’s exhibit numbers.

| Contribution | Core paper | Indep. cites | Supports |
|----------------|---------------------------------------------------------------------------------------------|--------------|------------------------------------|
| Contribution 1 | Brazilian longitudinal study of adult health (ELSA-Brasil): objectives and design | 6 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |
| Contribution 2 | Diretrizes brasileiras de hipertensão arterial–2020 | 7 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |
| Contribution 3 | Doenças crônicas não transmissíveis no Brasil: prioridade para enfrentamento e investigação | 5 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |